

# Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

January 2016

## Mars Science News

### **31st MEPAG meeting — First Announcement**

March 2-3, 2016

Silver Spring, MD

Professor Lisa Pratt, MEPAG Chair, cordially invites attendance to the 2016 face-to-face MEPAG meeting, scheduled for 1.5 days, March 2-3, 2016, in Silver Spring, MD. There have been many developments in Mars exploration since the 2015 MEPAG meeting: Discoveries by Curiosity and other operating Mars missions, hydrated salts in RSL, a second landing site selection workshop for Mars 2020, and the first landing site workshop for human missions to Mars, as well as a Human Science Objectives SAG (HSO-SAG), an HEOMD ISRU & Civil Engineering (ICE) Working Group, and a Next Orbiter SAG (NEX-SAG). This meeting will report on the implications of these events and the overall status of Mars exploration, and will also handle some organizational matters for MEPAG (e.g., Chair and Executive Committee succession). The meeting is open to all members of the Mars science community, as well as our international colleagues. It will also be broadcast via Adobe Connect for those who cannot attend in person.

Information, as it becomes available, will be posted here: <http://mepag.jpl.nasa.gov/meetings.cfm?expand=m31>.

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### **MEPAG Next Orbiter (NEX) SAG final report is posted**

The MEPAG Next Orbiter SAG (NEX-SAG) report is now available: <http://mepag.nasa.gov/reports.cfm?expand=topical>

Chaired by Bruce Campbell and Rich Zurek, the NEX-SAG outlined possible payloads and scopes of a potential 2022 Mars orbiter, addressing science, resource/SKG, reconnaissance, and relay objectives.

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### **Special LPSC Session on NASA's Planetary Science Division Facilities**

LPSC abstract deadline: January 12, 2016

As NASA's Planetary Science Division (PSD) is evolving how it deals with funded facilities, it is important to identify current facilities, how they are working, and the extent to which they serve the science needs of the broader planetary community. NASA's PSD will hold a special session on this topic and is inviting members of the community to submit abstracts for oral or poster presentation, describing their facility, its capabilities, its uses, and its potential service to the community at large. NASA will also outline its plans for implementation of a new facilities program within the Planetary Science Division. Abstracts submitted to this session will not count against the limit of two abstracts per first author for science presentations at LPSC.

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### **NASA RFI: Developing a Community-based Roadmap for Planetary Data Services**

(Extended) Deadline: January 25, 2016

NASA is preparing to work with the planetary science community to develop a Roadmap for its Planetary Data Services - the data and sample management architecture that supports the robotic exploration of the Solar System - particularly, the Planetary Data System (PDS). This Roadmap will address actions for the years 2017-2026. NASA is seeking input from the planetary and data science communities in the form of a Request For Information (RFI) designated NNH15ZDA012L that has been posted on NSPIRES: <http://nspires.nasaprs.com/>. Questions should be addressed to Michael New ([michael.h.new@nasa.gov](mailto:michael.h.new@nasa.gov)).

## **MAVEN Science-Team Meeting**

February 2-5, 2016

Boulder, CO, USA

The next MAVEN science-team meeting will be held in Boulder on 2-5 Feb 2016. We invite our scientific colleagues who are analyzing MAVEN data to participate in the meeting. If you would like to attend, please email [bruce.jakosky@lasp.colorado.edu](mailto:bruce.jakosky@lasp.colorado.edu), and include a brief statement (one or two sentences) describing your MAVEN analysis. **No walk-ins without prior approval, for logistical/planning reasons.**

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## **SMD seeks input on the Standard AO**

Deadline: January 15, 2016

SMD develops each individual AO solicitation by customizing a SMD framework document, the Standard AO. SMD reviews and revises the Standard AO periodically to incorporate updates and improvements. SMD is currently initiating a comprehensive review of the Standard AO and welcomes suggestions from the proposing community. The current (June 2014) [Standard AO Template](http://soma.larc.nasa.gov/standardao/sao_templates.html) may be found at [http://soma.larc.nasa.gov/standardao/sao\\_templates.html](http://soma.larc.nasa.gov/standardao/sao_templates.html). SMD is interested especially in constructive modifications that could result in shortening and/or simplifying Step 1 proposals submitted for two-step flight mission acquisitions. These and other suggestions should be submitted via E-mail to the parties below by January 15, 2016:

Dr. Thomas Wagner [thomas.wagner@nasa.gov](mailto:thomas.wagner@nasa.gov) & Mr. Washito Sasamoto [washito.a.sasamoto@nasa.gov](mailto:washito.a.sasamoto@nasa.gov)

After receiving these inputs, NASA will consider them in concert with other information to develop a revised Standard AO, which will then be released in March 2016, via NSPIRES and FedBizOpps and posted at the Standard AO website above. Comments on the revised Standard AO may be submitted for consideration during regular ongoing AO development.

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## **Concepts needed for Future Operation of the Arecibo Observatory**

Deadline: January 15, 2016

Community responses are requested on viable concepts for the future continued operation of the Arecibo Observatory, a scientific research and education facility located in Puerto Rico, owned by the National Science Foundation (NSF). Responses are due by January 15, 2016, to the Arecibo Observatory Program officer of the NSF Division of Astronomical Sciences, Dr. Ralph Gaume ([rgaume@nsf.gov](mailto:rgaume@nsf.gov)). For more information, please see the Dear Colleague Letter:

<http://www.nsf.gov/pubs/2016/nsf16005/nsf16005.jsp>.

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## **Summer School: Biosignatures and the Search for Life on Mars**

4-16 July 2016

Reykjavik, ICELAND

This summer school aims to cover the subject of the search for life in different environments, both on early Earth, below Earth's surface and on Mars. It will bring together students and researchers from a multitude of different fields. Field studies on the colonization of lava fields and Mars analogue landscapes will complement the lectures.

For further information about the summer school please check the website at: <http://www.nordicastrobiology.net/Iceland2016/>.

The deadline for application is 31 March 2016 23:59:00 UTC.

## Summer School “Volcanism, Plate Tectonics, Hydrothermal Vents and Life”

August 23– September 1, 2016

Azores, PORTUGAL

The course aims to give participants a thorough introduction into influence of volcanism, plate tectonics on life and the role of hydrothermal vents in the emergence of life. It is co-organised by the European Astrobiology Campus, the Nordic Network of Astrobiology and the COST Action “Origins and Evolution of Life in the Universe”. Travel grants are available for students and early career investigators affiliated to universities in most European countries. For further information about the summer school please check the website: <http://www.nordicastrobiology.net/Azores2016/>. Deadline for applications is 15 March 2016 23:59 UTC.

### Near-term Due Dates (next three months)

Due	Project
January 12	<b>LPSC</b> Abstract deadline
January 13	<b>European Geosciences Union General Assembly 2016</b> , Abstract deadline
January 22	<b>International Venus Conference</b> , Abstract and student travel grant application (via conference) deadlines
January 29	<b>Martian Gullies and their Earth Analogues</b> , Abstract deadline
February 5	<b>Water in the Universe: From Clouds to Oceans</b> , Early Registration deadline
February 12	<b>41st Scientific Assembly of the Committee on Space Research (COSPAR 2016)</b> , Abstract deadline
February 15	<b>ASCE Earth and Space 2016 Conference</b> , Registration deadline
March 17	<b>European Geosciences Union General Assembly 2016</b> , Registration deadline

### Upcoming Conferences and Workshops

A note about “conferences” and this calendar of events

- Missing NCTS#s (and forecasting deadline, if anomalous) can be sent to Meredith Cosby ([Meredith.A.Cosby@jpl.nasa.gov](mailto:Meredith.A.Cosby@jpl.nasa.gov)).
- If no deadline is noted: it is usually 90days in advance — sometimes further in advance if the conference is “Heavily Attended.”
- Please do not assume our noting of NCTS# is complete. If you are unsure if an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

### First Quarter, 2016

	January 13, 2016 Tempe, AZ, USA	<b>Mars Odyssey 2001 PSG</b>
	January 27-29, 2016 Orlando, FL, USA	<b>14th Meeting of the NASA Small Bodies Assessment Group (SBAG)</b> <a href="http://www.lpi.usra.edu/sbag/">http://www.lpi.usra.edu/sbag/</a> , NCTS# 23764-16
	March 2-3, 2016 Silver Spring, MD, USA	<b>MEPAG Meeting #31</b> <a href="http://mepag.jpl.nasa.gov/meetings.cfm">http://mepag.jpl.nasa.gov/meetings.cfm</a> , NCTS# 24324-16
	March 5-12, 2016 Big Sky, MT, USA	<b>IEEE Aerospace Conference</b> <a href="http://www.aeroconf.org/">http://www.aeroconf.org/</a> , NCTS# 22854-16
	March 14, 2016	<b>20-Day 2016 ExoMars Launch Period Opens</b>
	March 21-25, 2016 The Woodlands, TX, USA	<b>Lunar and Planetary Science Conference (LPSC)</b> <a href="http://www.hou.usra.edu/meetings/lpsc2016/">http://www.hou.usra.edu/meetings/lpsc2016/</a> , NCTS# 23351-16
	March 29-31, 2016 Washington DC, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>

## Second Quarter, 2016

	April 4-8, 2016 Oxford, UK	<b>International Venus Conference</b> <a href="http://venus2016.uk/">http://venus2016.uk/</a>
	April 11-15, 2016 Orlando, FL, USA	<b>ASCE Earth and Space 2016 Conference:</b> 15th Biennial ASCE International Conference on Engineering, Science, Construction, and Operations in Challenging Environments <a href="http://earthspaceconf.mst.edu/">http://earthspaceconf.mst.edu/</a> , NCTS# 23397-16 <i>Symp. 1: Granular Materials in Space Explorat., Symp. 2: Explorat. &amp; Utilizat. of ET Bodies</i>
	April 12-15, 2016 Noordwijk, NETHERLANDS	<b>Water in the Universe: From Clouds to Oceans</b> <a href="http://www.congrexprojects.com/2016-events/16a06">http://www.congrexprojects.com/2016-events/16a06</a>
	April 17-22, 2016 Vienna, AUSTRIA	<b>European Geosciences Union General Assembly 2016</b> <a href="http://egu2016.eu/home.html">http://egu2016.eu/home.html</a> , NCTS# 23760-16 <i>Session PS2.3: Mars Science and Exploration</i>
<b>New!</b>	Week of May 16, 2016 Reno, NV, USA	<b>Biosignature Preservation and Detection in Mars Analog Environments</b> <a href="http://www.hou.usra.edu/meetings/biosignature2016/">http://www.hou.usra.edu/meetings/biosignature2016/</a>
	May 17-19, 2016 Washington, DC, USA	<b>Humans to Mars Summit</b> <a href="http://h2m.exploremars.org/">http://h2m.exploremars.org/</a> , NCTS# 24381-16
<b>New!</b>	May 18-19, 2016 Amsterdam, NETHERLANDS	<b>4th European Lunar Symposium</b> <a href="http://sservi.nasa.gov/els2016/">http://sservi.nasa.gov/els2016/</a>
	May 24-25, 2016 Oxford, UK	<b>iCubeSat 2016, the 5th Interplanetary CubeSat Workshop</b> <a href="http://icubesat.org/">http://icubesat.org/</a>
<b>New!</b>	June 13-17, 2016 Laurel, MD, USA	<b>International Planetary Probe Workshop (IPPW-13)</b> <a href="http://ippw2016.jhuapl.edu/index.php">http://ippw2016.jhuapl.edu/index.php</a> <i>additional short course offered June 11-12, 2016</i>
<b>New!</b>	June 20-21, 2016 London, UK	<b>Martian Gullies and their Earth Analogues</b> <a href="https://www.geolsoc.org.uk/martiangullies">https://www.geolsoc.org.uk/martiangullies</a>
	June 20-24, 2016 Potsdam, GERMANY	<b>11th International Conference on Permafrost (ICOP) 2016</b> <a href="http://icop2016.org/index.php/program">http://icop2016.org/index.php/program</a> <i>Session #16 "Planetary Permafrost and Earth Analogues"</i>

## Third-Fourth Quarters, 2016

	July 30-August 7, 2016 Istanbul, TURKEY	<b>41st Scientific Assembly of the Committee on Space Research (COSPAR 2016) and Associated Events</b> <a href="http://www.cospar-assembly.org">http://www.cospar-assembly.org</a>
	August 7-12, 2016 Berlin, GERMANY	<b>Annual Meetings of the Meteoritical Society</b>
	September 5-9, 2016 Reykjavik, ICELAND	<b>6th International Conference on Mars Polar Science and Exploration</b> <a href="http://www.hou.usra.edu/meetings/marspolar2016/">http://www.hou.usra.edu/meetings/marspolar2016/</a> , NCTS# 23841-16
	September 14-15, 2016 Irvine, CA, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
	October 16-21, 2016 Pasadena, CA, USA	<b>Joint DPS-EPSC Meeting</b>
	October 19, 2016	<b>2016 ExoMars (TGO and EDM) Arrival at Mars</b>

## 2017

<b>New!</b>	March 28-30, 2017 Washington, DC, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
<b>New!</b>	September 13-14, 2017 Washington, DC, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>

## Seasons on Mars

	MY33	MY34	MY35
<b>Start of Northern Spring / L<sub>s</sub> 0</b>	6/18/2015	5/05/2017	3/23/2019
<b>Start of Northern Summer / L<sub>s</sub> 90</b>	1/03/2016	11/20/2017	10/08/2019
<b>Start of Northern Autumn / L<sub>s</sub> 180</b>	7/04/2016	5/22/2018	4/08/2020
<b>Start of Northern Winter / L<sub>s</sub> 270</b>	11/28/2016	10/16/2018	9/02/2020

## Special holidays to consider when scheduling conferences/workshops/meetings

Good Friday	3/25/2016	4/14/2017	3/30/2018	4/19/2019
Rosh Hashanah	9/16/2016	9/20/2017	9/10/2018	9/30/2019
Yom Kippur	9/25/2016	9/29/2017	9/19/2018	10/8/2019
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/8/2016	10/9/2017	10/8/2018	10/14/2019
Thanksgiving Day, U.S.	11/22/2016	11/23/2017	11/22/2018	11/28/2019
Christmas Day	12/25/2016	12/25/2017	12/25/2018	12/25/2019

## Editors

Meredith Cosby	<a href="mailto:Meredith.A.Cosby@jpl.nasa.gov">Meredith.A.Cosby@jpl.nasa.gov</a>	818-354-0226
Serina Diniega	<a href="mailto:Serina.Diniega@jpl.nasa.gov">Serina.Diniega@jpl.nasa.gov</a>	818-393-1487
David Beaty	<a href="mailto:David.Beaty@jpl.nasa.gov">David.Beaty@jpl.nasa.gov</a>	818-354-7968

Please send your Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

Meredith Cosby at [Meredith.A.Cosby@jpl.nasa.gov](mailto:Meredith.A.Cosby@jpl.nasa.gov).

This newsletter (and all previous months') is also posted on the MEPAG website: <http://mepag.jpl.nasa.gov>

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